

# Angela Zhu

[angelzhua@gmail.com](mailto:angelzhua@gmail.com) | 516-853-1102 | [Github](#) | Ithaca, NY

## EDUCATION

### Cornell University, College of Arts and Sciences

*Expected May 2027*

Bachelor of Arts in Computer Science, Minor in Game Design

3.7 GPA

**Coursework:** Data Structures & Functional Programming\*, Object-Oriented Programming & Data Structures, Discrete Structures, Statistics & Probability\*, Introduction to Computer Game Development, Linear Algebra (\* = Fall 2024)

## TECHNICAL SKILLS

- **Programming Languages:** Java, C#, Python, HTML/CSS, OCaml
- **Tools:** React, Git/GitHub, JSON, Fusion 360, Unity, LibGDX, Blender, Tiled, Adobe Photoshop

## RELEVANT EXPERIENCE

### Software Developer, Combat Robotics @ Cornell Project Team

*October 2023 - present*

- Redesigned team website using Figma and programmed using React and CSS in an ongoing project to allow for easier site edits and better visual appeal for hundreds of site viewers
- Launched monthly website updates using HTML/CSS to promote the team, recruitment, and major events, and published the site using FileZilla
- Collaborated with 3 members on programming a claw machine in Python using a Raspberry Pi, including the joystick, motor, and claw mechanisms

### Private Tutor (Java)

*June - July 2023*

- Provided personalized Java programming instruction to 2 middle school students, focusing on foundational concepts to build interest in computer programming
- Developed 5+ tailored lesson plans and exercises to enhance each individual student's understanding of each topic

## PROJECTS

### McDiver Optimization Project | Programmer

Object-Oriented Programming and Data Structures, Cornell University

*December 2023*

- Collaborated with a partner to optimize a computer simulation in Java using Dijkstra's and A\* algorithms, halving pathfinding time and doubling the final collection score

### Lunar Looter Video Game | Project Lead

*May - August 2024*

Independent Project

- Spearheaded the creation of a 2D stealth game using Unity and C# with 12 levels in a team of 3 members
- Led meetings and implemented 4 day "sprint" system with check ins, which improved productivity by 80%
- Implemented enemy artificial intelligence (AI) algorithms, UI/UX, level design, and ray casting

### Seas the Throne Video Game | Programmer and Designer

*January - May 2024*

Introduction to Computer Game Development, Cornell University

- Collaborated with 7 members to conceptualize and develop an open world bullet hell game in Java and LibGDX
- Programmed user interface (UI), menus, screens, animations, controllers, and debugged code as issues occurred
- Developed and programmed a bullet pattern simulator to provide visualization for coded bullet patterns in boss AI, which increased efficiency of new bullet pattern creation by 50%
- Led 5 user testing sessions to gather feedback on gameplay which produced tangible improvements to the game's user experience (UX) and AI algorithms

## SKILLS AND INTERESTS

Language: Fluent in Chinese, Advanced in Spanish

Interests: Orchestra (All Eastern), digital art, Girl Scouts, cross country